Field Office Technical Guide Section III May 2002

## IV. PLANT - Resource Quality Criteria

Plant resource includes all plants (native, introduced, and domesticated) and the plant communities occurring on forestland, native pasture, pastureland, hayland, cropland, and other land uses including wildlife areas, recreation land, and urban land, that are managed in a manner to meet the needs of the soil, water, air, and animal resources as well as the objectives of the land users.

Plants resource consists of three major consideration categories:

- 1. Suitability
- 2. Condition
- 3. Management

The planning and technical assistance criteria for plant suitability, conditions, management and the associated problems will meet the overall criteria for each land use as follows:

Plants on all land uses are used, maintained and improved to achieve acceptable production levels to meet conservation, environmental, decisionmaker, and public objectives.

On cropland, crops are grown in the planned sequence that meets conservation, production, and decisionmaker objectives; and weeds, insects, other pests, and diseases are adequately treated.

On Hayland, dominant native or introduced plant species are appropriate for the forage, agronomic, or commercial use; well adapted to the site; and their stand density is maintained or improved.

On Native Pasture, herbaceous plants are properly grazed, forage value rating is medium or better, vigor is strong and is commensurate with overstory canopy.

On Pastureland, dominant plant species are appropriate for the use, adapted to the site, and their stand density is adequate and productivity is maintained or improved.

On Forestland, trees are well distributed, vigorous, relatively free of insects, disease, and other damage, and the density of the stand is within 25 percent of forest stand density guide spacing on a stems-per-acre basis for the particular forest type. Forestland shall be protected from wildfires and erosion. Forestland that is grazed shall also be managed to meet the needs of the forage plants, the animals, and the objectives of the decisionmaker. On land where trees are for the purpose of watershed protection and/or aesthetics, the minimum quality criteria will be protection from wildfires and erosion.

On Wildlife Land, Recreation Land, and Other Land, adapted or native plants are of sufficient quantity, quality, and diversity to improve or protect the defined resource.

On Urban Land uses, soil cover is maintained using suitable plants or other cover to keep soil erosion within acceptable limits, minimize runoff, and manage infiltration.

## A. Suitability

1. Plants are not well adapted to site – Plants are not adapted to soil and climatic conditions of the area. (Select a better adapted species or modify site conditions.)

Criteria are met when planned measures either modify the site to better suit the plants or change plants that will contribute toward achieving the quality level as stated for the land use.

2. Plants are unsuitable for intended use – Plant of concern does not meet the needs and objectives of the manager, such as by providing the quantity and quality of desired food or forage, controlling erosion, improved soil condition, conserving water, adding beauty, providing habitat for animals, and increasing crop or timber production. (Change plants)

Criteria are met when planned measures shift to plants that will be suitable for the planned use and contribute toward achieving the quality level as stated for the land use.

## B. Condition

1. Productivity (kinds, amounts, and distribution) – Plants do not provide the quantity and quality of crops, forage, wood products, and cover and habitat in the amount and timeliness of production needed.

Criteria are met when planned measures provide the production needed and will contribute toward achieving the quality level as stated for the land use.

2. Health and vigor – Plants do not manufacture sufficient plant food to continue the growth cycle or to reproduce.

Criteria are met when planned measures overcome the identified constraining condition or problem and contribute towards achieving the quality level as state for the land use.

3. Threatened and Endangered Species – Site modification may cause loss or reduction of population.

Criteria are met when planned measures do not adversely affect existing, threatened, and endangered plant species.

## C. Management

1. Establishment, growth and harvest – The management scheme or plan does not provide the proper techniques and timing to meet the plant needs of establishment, growth, and harvest.

Criteria are met when management measures, improved farmability, or plans overcome the identified constraining condition(s) or problems, and contribute towards achieving the quality level as stated for land use. Special consideration will be given to protection of plants from climatic conditions, such as excessive sediment damage from wind and water, and extreme temperature.

Nutrient Management – The correct amount of plant nutrients are not available to meet plant needs. U. S. Department of Agriculture Natural Resources Conservation Service North Carolina Field Office Technical Guide Section III May 2002

Criteria are met when planned measures provide for plant nutrients to be applied in accordance to a tissue analysis or a soil test to meet the needs of the plant to produce the desired level of production as stated for the land use. When nutrients are to be applied, **NUTRIENT MANAGEMENT** becomes an essential practice. Where the source of nutrients is from organic wastes, then **WASTE UTILIZATION** becomes an essential practice.

3. Pests (undesirable brush, weeds, insects, diseases, fungi, etc.) – Pests are not managed to meet the needs of the plants concern, the manager's objectives, and resource management objectives.

Criteria are met when planned measures treat identified pest problems and contribute toward achieving the quality level as stated for the land use. Federal, State, and local pest laws or regulations will be followed. When pest control is planned, **PEST MANAGEMENT** will be an essential practice.